

ABSTRACT OF THE DISCLOSURE

A communication system 1 includes interrogators 10, 11 and transponders 20, 21, 22. The interrogator 10 transmits a carrier wave, FC1, to the transponders 20, 21, 22, and the transponders 20, 21, 22 return respective reflected waves, f1, f2, and f3, to the interrogator 10. The transponders 20, 21, 22 modulate the received carrier waves FC1 using respective subcarrier waves that have been modulated using respective information signals, and return the thus modulated carrier waves as the reflected waves f1, f2, and f3 to the interrogator 10. The transponders 20, 21, 22 hop the frequencies of the subcarrier waves according to respective different hopping patterns, such that an initial hopping frequency with which each of the frequency hopping patterns begins represents right-hand two bit values of a four-bit identification code of a corresponding one of the transponders 20, 21, 22, and respective hopping frequencies of the each frequency hopping pattern represent respective bit values of four-bit transmission data transmitted from the corresponding transponder 20, 21, 22 to the interrogator 10.